



Prairie Update

A publication of the Saskatchewan Watershed Authority Volume 18 Winter 2004



A Neighborhood Grows Through Watershed Stewardship

When Cher King was hired as the coordinator of the "Swift Current Creek Watershed Stewards," she thought she would be working in a watershed that begins at the Cypress Hills and eventually drains into the South Saskatchewan River.

Change the word watershed to neighborhood. "I guess that's what this group is about - allowing us to expand our concept of what a neighbor is and feeling like there's a lot larger sense of community," said King, who joined the Stewards after their incorporation in November 2001.

With goals to educate, monitor and assist in cooperative solutions, this non-profit group has been highly successful in raising an awareness about watershed health.

"If there is an interest and people are looking towards being proactive instead of reactive and really understanding

what's going on in their community, the best way to go about that is to talk to your neighbors," said King.

To bring neighbors closer, the Stewards started a newsletter, distributed within a local newspaper to 19,000 households in the watershed. An extensive website, that will soon feature an interactive map, also helps stakeholders share their stories.

Examples include water monitoring being done by cottage owners, high school students and producers; landowners exchanging ideas through stewardship projects and the wildlife federation doing a wetland project at Swift Current. The city's initiatives include effluent irrigation and a commitment to build a tertiary wastewater treatment facility in 2004.

To initiate new activities, including student workshops; a 'state of the watershed report,' and an extensive

four-year monitoring project, the Stewards have worked hard at building partnerships and fund-raising. Since this requires a great deal of proposal writing, having a coordinator helps.

"But if you can work on developing a strong group, everything else will come after that - just as a 'side effect,'" said King of the group's success.

So aside from long term environmental sustainability, what motivates people to drive from the far reaches of the watershed to meet and volunteer their time?

"While they may have their own specific concerns, part of it is just the sense of doing something as a community group that's positive and progressive. They also realize they are one of the first pilot projects in Saskatchewan. I think that gives them a sense of importance to keep coming back and to make sure that we do a good job of what we're doing."

Focus on: Swift Current Creek Watershed

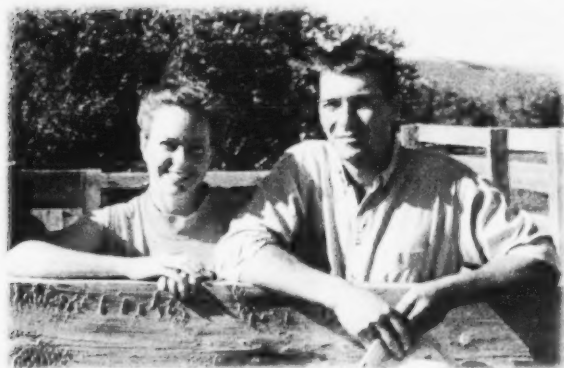
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Since 1996 the Saskatchewan Watershed Authority has been involved in stewardship projects in the southwest. Here are few examples.

Brian and Christine Hanel operate the Flying K Red Angus Ranch along Swift Current Creek. To maintain the condition of riparian areas, defer grazing of native prairie and reduce the impact of a livestock wintering area, the Hanel are in the process of implementing stewardship practices that suit their needs. Some changes being considered include fencing off an 80 acre pasture of crested wheatgrass and developing a remote watering site to keep cattle out of the creek valley in spring. In another area, a winter watering system and slab windbreaks will be used.

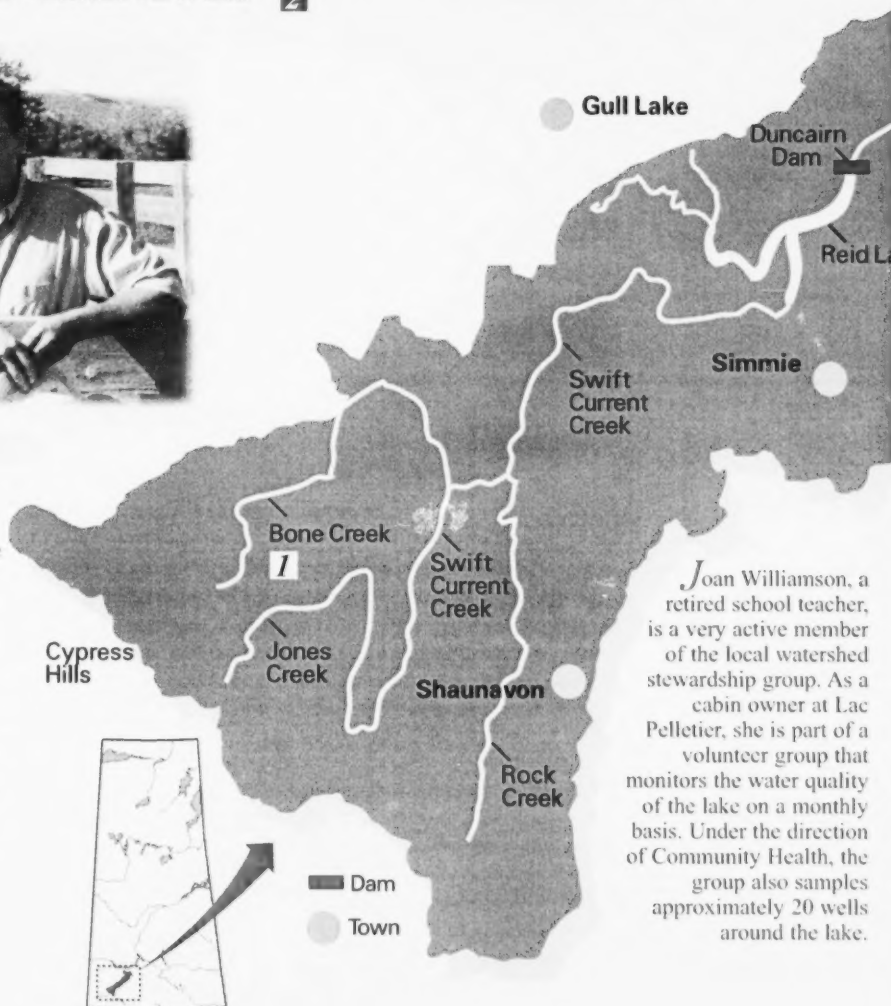


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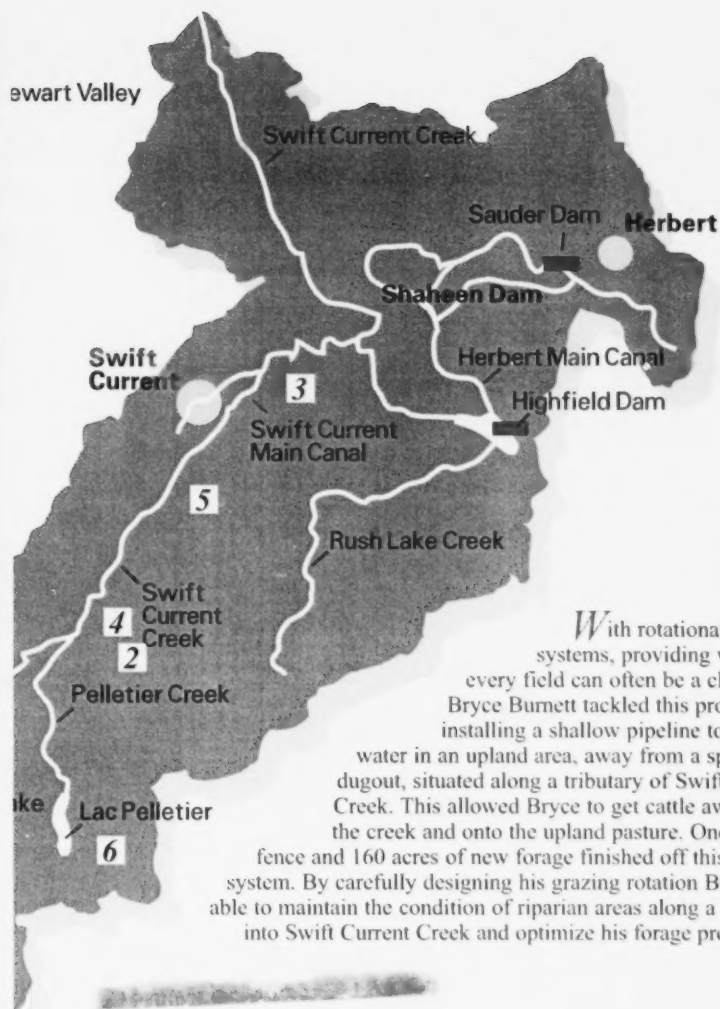


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Jason and Karmen McNabb's wintering grounds for backgrounding calves were previously located on Bone Creek, which is known to anglers as one of the best brown trout streams in the province. To relocate their wintering site to an upland area, the McNabbs developed a new well, constructed corrals and created a berm to control runoff. The McNabbs, who have also developed a winter grazing plan for their fescue prairie, have hosted numerous workshops and have also been featured on the stewardship video "Caring For a Prairie Treasure."



Joan Williamson, a retired school teacher, is a very active member of the local watershed stewardship group. As a cabin owner at Lac Pelletier, she is part of a volunteer group that monitors the water quality of the lake on a monthly basis. Under the direction of Community Health, the group also samples approximately 20 wells around the lake.



3

Reg Parsons spent many hours learning how to swim and playing in the creek as a young boy. As a landowner and watershed steward, he is trying to do his part for its future health. While he traditionally wintered his cattle along the creek, he developed an alternative watering site away from it, and is presently building four-and-a-half miles of fence along each side. He is also part of the "Downstream Users" water monitoring group.

With rotational grazing systems, providing water for every field can often be a challenge. Bryce Burnett tackled this problem by installing a shallow pipeline to provide water in an upland area, away from a spring-fed dugout, situated along a tributary of Swift Current Creek. This allowed Bryce to get cattle away from the creek and onto the upland pasture. One mile of fence and 160 acres of new forage finished off this grazing system. By carefully designing his grazing rotation Bryce was able to maintain the condition of riparian areas along a tributary into Swift Current Creek and optimize his forage production.

4



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In an effort to get a lagoon for septic tank dumping at Lac Pelletier, Joan was also part of a committee that worked with the RM of Lac Pelletier to acquire a federal-provincial infrastructure grant.



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Because of his love for wildlife, Rick Anderson planted trees and shrubs along the Swift Current Creek near his home. Saskatoon, poplar, Scotch pine, carraganas, willows, sea buckthorn, hawthorn and burr oak were planted. Plastic mulch and a drip irrigation system were used to protect some of the saplings. The trees and shrubs should aid in stabilizing the streambanks and improving water quality. The PFRA shelterbelt center was an important partner in this project and provided seedlings.

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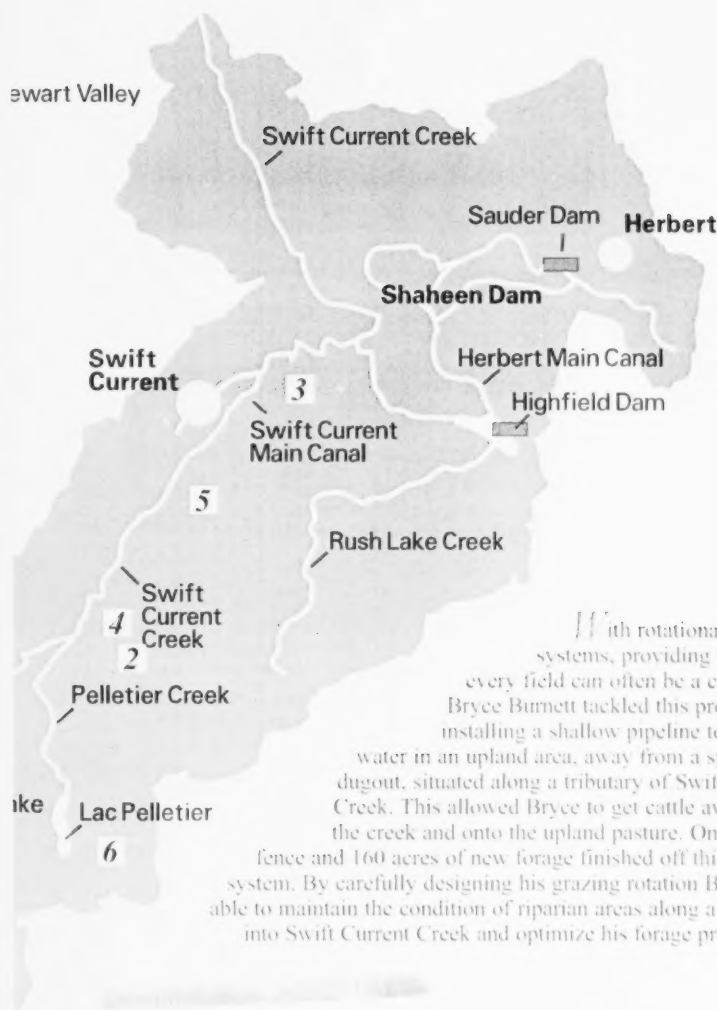


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Producers Dwane Morvik (left) and Mario Dordu (right) have made presentations about their stewardship practices in the Eastend-Shaunavon areas.

"We'd like to do lots more, but with the way the cattle business is struggling right now, we can't."

To draw cattle away from the creeks, which usually stop flowing in late summer, the Dordu's have been fencing off springs and using gravity flow watering systems.

One of these systems, funded in part through the Saskatchewan Watershed Authority in 2002, involved

deepening a spring fed dam. A solar water pumping system was then installed to pump water to a nearby trough, which was connected with an underground pipeline to another trough several hundred feet away.

"We're also trying not to concentrate our cattle in a feedlot. Our calves run in a quarter section," said Dordu, adding that livestock distribution can also be managed to reduce runoff.

He concluded the greatest improvement, however, is the family's ongoing effort to convert marginal land back to grass.

While they have 3,000 acres of native prairie lease land, the family manages a total of 7,000 acres, "From that, we've probably seeded back close to 2,000 acres. And we're going to seed more," said Dordu.

Noting the watershed is healthier where there is native prairie, Dordu concluded it's obvious some areas aren't suited for farming.

"At one time, wheat was king and everybody was trying to farm everything close to the creeks and side hills," he said. "We just gave that up. Between the fertilizer, spray and everything you use - it's not good for it. And the erosion is especially bad. You get silt in the creek bottom. And there's no doubt that our springs have probably gotten weaker too. I think not farming along the creeks has made a difference."

Small Changes Make a Big Difference

As a landowner, reeve of the RM of Arlington No. 79 and a member of the Swift Current Creek Watershed Stewards, Frantz Dordu has a special interest in doing his part for a healthy environment. On the east side of the Cypress Hills, where coulees are dotted with pines and lined with poplars, Dordu's family has carved out a way of life for several generations.

And water has been a big part of it.

"Two creeks join on our place and I guess that's how we came up with the name 'Joint Creek Ranch,'" he said, noting the Southfork junction of Swift Current Creek and Jones Creek. "There used to be a little town called Southfork down there at one time. But it's all gone now."

To ensure the family operation remains viable in the future, Dordu, his wife Anna, their sons Mario and Mark and their wives Deanna and Rachelle and two young grandsons have been making management changes.

While they run a 300 head Hereford and Black Angus cow-calf operation, with calves being kept over and sold as yearlings in September - they are trying to reduce livestock impact on creek banks.

"It's pretty hard because the home place was settled by my grandfather years ago. You just can't pack up and move after three generations. So we're just taking small steps to improve it as best we can," he said, citing economic factors.



Swift Current Creek flowing through Pine Cree Regional Park near Eastend

How Can You Protect Native Prairie?

If you're between Kindergarten and Grade 6, you might say the answer is to eat beef or lamb raised on native prairie.

Through a stewardship education program, called the "Eco-extravaganza" rural schools and communities are learning first hand about the common ground shared by the ranching industry and those involved in conservation efforts.

Krista Connick, a range agrologist with the Saskatchewan Watershed Authority in Swift Current, is one of the event facilitators.

She said, "The reason we have any native prairie left is because we have ranching. We're trying to highlight the positive role of landowner stewardship."

Eco-X, coordinated through the Prairie Conservation Action Plan (PCAP), combines interactive sessions on water quality, ecosystem health and species at risk with the "Cows, Fish, Cattle Dogs and Kids Game Show" and the Saskatchewan Burrowing Owl Interpretive Centre's "Owls on Tour Program." Grasslands National Park, Ducks Unlimited Canada and Nature Saskatchewan also lead activities.

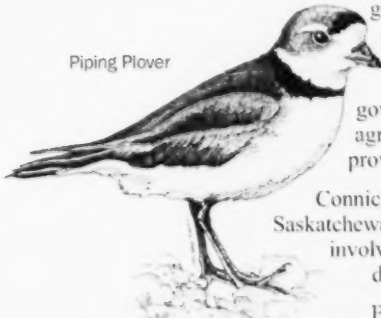
But it's not only about music, games and drama.

While the Eco-X was developed in 2000, a landowner component was added to the program in 2001. And here is how it's delivered:

Every year, several partner groups involved in the Prairie Conservation Action Plan spend a week or two in a given region, visiting schools and making presentations. To make the most of their travels, they also host town hall meetings for landowners in the evenings.

The purpose of the evening meetings is to inform landowners about the availability of funding and technical assistance through stewardship programs. Landowners already involved in stewardship projects are often invited to share their experiences.

Piping Plover



Saskatchewan's PCAP which has grown steadily since 1998, includes the support of 25 partners representing industry, federal and provincial governments, conservation and agricultural groups and the province's two universities.

Connick, who is one of three Saskatchewan Watershed employees involved in the Eco-X, said "It's a very different way of using my degree."

But is it necessary to do this job? "Definitely," she said. "There's some pretty smart kids out there. And when it comes to answering the specific questions they come up with, you've really got to be on your toes."

For Connick, who grew up on a mixed farm on the "Bench" south of Gull Lake, a background in both agriculture and science comes in pretty handy.

In her line of work she has done everything from range and wetland assessments to helping landowners set up stewardship projects.



In rural and lakeside communities, she has also worked with volunteer groups interested in doing their own water quality monitoring. With these experiences to draw from, Connick hopes to instill in others a greater appreciation for "native prairie."

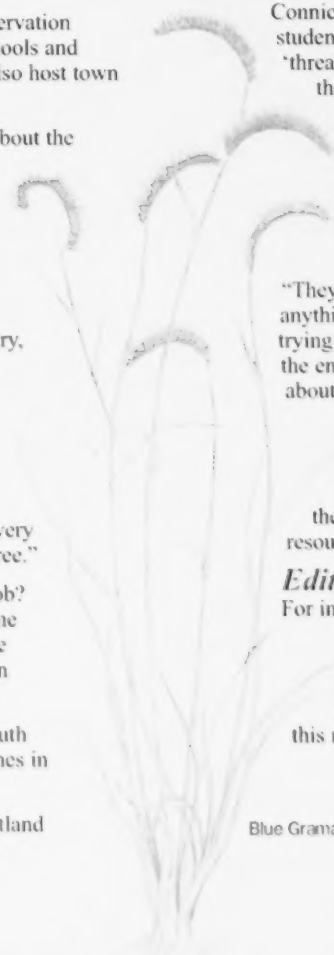
Connick said, "When we ask students about things that are 'threatened or endangered,' they think of pandas, tigers and rainforests instead of native prairie plant species and wildlife such as Burrowing Owls, Whooping Cranes, Piping Plovers and Sage Grouse."

"They generally don't think of anything close to home. We're trying to help them understand that the environmental issues they talk about in school relate exactly to what they're doing and what their parents are doing. And when they drive down the highway - they're looking at a valuable resource."

Editor's Note:

For information about school visits and landowner meetings in the Swift Current region, please refer to the coming events at the back of this newsletter.

Blue Grama Grass



Watershed Health Important to Qu'Appelle Valley Producer

On a clear, quiet night when every star is visible, and northern lights complement the moon's winter glow, Duane Bartok of Esterhazy can fully enjoy the rewards of country life.

Watching while his cattle are content and bedded down on fresh straw nearby - he knows there is no place he would rather be.

But along with hopes for a tolerable winter and healthy calf crop in spring - his thoughts eventually include water.

While most people expect producers to think about water in dry months, when crops may be struggling or pastures may be turning brown - winter brings its own special considerations.

For Bartok, whose operation is nestled in the bottom of the Qu'Appelle Valley, on the south side of the river, cattle wintering sites are managed with spring runoff in mind.

While the seasonal moisture is welcomed, Bartok knows that where this water goes has an impact on his operation and the health of the watershed. Here, the watershed is shared by a species of concern, called the Bigmouth Buffalo Fish.

To maintain a healthy environment and provide benefits for the fish, Bartok is using management practices that decrease sedimentation of the river. This has a positive effect on fish reproduction because the eggs require a certain level of oxygen for hatching.

"As far as sediment getting in, there was some. But there's going to be that much less now," said Bartok, noting that recent changes should make a difference. To improve his operation, Bartok did three cost-shared stewardship projects, started with the former



Duane Bartok and his daughter Courtney.

Saskatchewan Wetland Conservation Corporation, now part of the Saskatchewan Watershed Authority. Funding in part came from the Government of Canada Habitat Stewardship Program for Species at Risk.

In describing the operation, which includes his wife Cindy and children Tyson, 12, Courtney, 8 and Kurt, 6, Bartok said they have a 130 head commercial herd, 1100 acres of cropland and 500 acres in forage.

"The cows are never supposed to leave the valley unless we haul them out with a truck," said Bartok, who runs his cattle with those of his father, Wilfred, who has 2,000 acres of pasture.

To minimize livestock impact, Bartok's first project was designed to relieve pressure on the riparian system, which provided natural shelter in the past. To do so, he built four portable windbreaks in 2002. Made of slabs, these windbreaks are 24 feet long and eight feet high.

"When I use them, I can bed my animals down in the middle of the field rather than in the willows, therefore keeping them out of the wetlands and streams," said Bartok.



Potentilla Argula

To provide additional forage for his livestock, Bartok's second project involved seeding a quarter of adjacent river land back to grass. As a stewardship project, this provides environmental benefits because land in permanent cover helps to filter runoff.

While exclusion fencing is an optional part of stewardship projects, Bartok also decided to fence this quarter and develop a livestock watering site in the middle of it.

"There was a bit of a spring there but it wasn't very good. So I dug a well and gravity fed it down to a hydrant - and then placed a tank at the hydrant. Since it doesn't take any power and I don't really use it in the winter, it works 100 per cent," said Bartok, adding that prior to his involvement with the Watershed Authority, he developed a similar system on the next half section.

"There I gravity fed the water from a dugout to a trough. I try to use as much gravity as I can," he said.

Bartok's third project, done in 2003, involved excluding a section of his corrals by fencing out a water run.

"In a couple of years I think it will mean a big deal," he said.



John Salamon, Saskatchewan Watershed Authority, has been involved in surveys of Bigmouth buffalo fish in the Qu'Appelle River system.

Over time, as this run becomes vegetated with native plants, it will deliver water with a lower sediment level to the Qu'Appelle River. It will also improve conditions near Bartok's livestock wintering facilities.

"I'm very happy because it looks like it should do the trick," said Bartok. "In the spring it was always bad because there were a couple of pens I couldn't use. They just got so soft I couldn't drive into them. And in the mud, the cows were sinking."

To summarize the experience of planning and completing these projects, Bartok said he is pleased with the "results" of sharing a common goal to "do things right."

"These were all the things that I wanted to try. It was just nice that there was some assistance," he said. "I feel that it's very worthwhile to try to conserve some of the habitat that we have left in the Qu'Appelle - and I'll try to do my part."

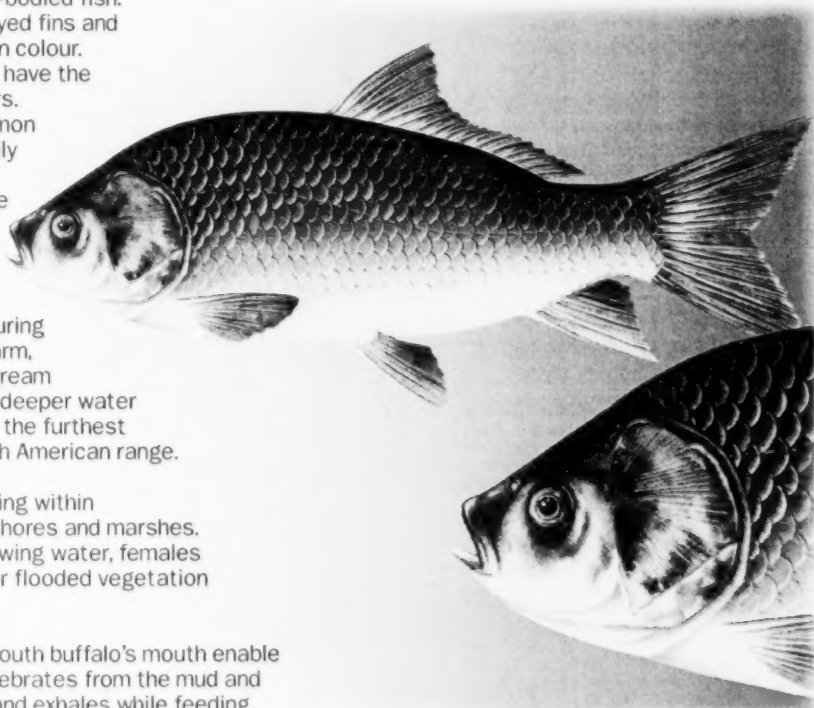
The largest of Saskatchewan's suckers, bigmouth buffalo can grow to lengths of 100 cm and weigh in excess of 25 kg.

Bigmouth buffalo are a stout, deep-bodied fish. They possess large scales, soft-rayed fins and are typically dark-brown to bronze in colour. They have large mouths and do not have the fleshy lips common to other suckers. Although often mistaken with common carp, bigmouth buffalo can be readily distinguished by the absence of whisker-like barbels surrounding the mouth.

Bigmouth buffalo are well adapted to the reservoirs of the Qu'Appelle River system which they inhabit. During summer months, they move into warm, shallow, protected bays in the upstream portions of the reservoirs and into deeper water in fall and winter. Saskatchewan is the furthest northwest limit of their native North American range.

Bigmouth buffalo spawn in late spring within tributary streams or flooded lake shores and marshes. Triggered by the onset of fresh, flowing water, females broadcast their eggs randomly over flooded vegetation within the shallows.

The long gill rakers within the bigmouth buffalo's mouth enable it to efficiently filter aquatic invertebrates from the mud and debris which it repeatedly inhales and exhales while feeding.



Hello Voluntary Stewards!

As you will see, we have started the New Year with a bit of a new look for our newsletter. To make room for more of our stories and photos, we moved our traditional cover letter to the back page - and shortened it up! We hope you enjoyed the articles we have included in this issue and welcome any comments you may have. While we have tried to focus on different areas or themes, such as particular watersheds for example, we are open to suggestions for future issues. With spring around the corner and cattle eager to get out to green pastures, we hope to put a greater emphasis on range management in our next issue. In closing, we would like to express our appreciation to Cher King and the Swift Current Creek Watershed Stewards for providing some of the photographs and material used throughout this issue. To learn more about their activities, you are invited to visit their website at: www.t2.net/secws.

*Jennifer Lohmeyer
Tracy Harrison*

Coming Events

Eco-Extravaganza

February 2-13, 2004

The Eco-X will be delivered to four Swift Current Schools as well as schools in Gull Lake, Wymark, Neville, Vanguard, Kincaid and Waldeck. Contact Karyn Scalise at 352-0472 or visit the website: www.pcap-sk.org.

Owls and Cows Tour

January to March 2004

This tour will be delivered to schools roughly bounded by the communities of Lloydminster, Quill Lakes and Melfort. Contact Karyn Scalise (above).

Town Hall Meetings on Stewardship Programs

February 3: Swift Current,
Animal Health Centre

February 4: Stewart Valley,
Community Hall

February 9: Gull Lake,
United Church Basement

February 10: Neville,
Community Hall

Doors open at 6:30 pm.
Meetings begin at 7 pm.

Contact Karyn Scalise (above)



Our Gracious Supporters

- Agriculture and Agri-Food Canada through the Agriculture Institute of Management in Saskatchewan, Inc.,
Agricultural Environmental Stewardship Initiative,
Canada-Saskatchewan Agricultural Green Plan Agreement,
Canadian Adaptation and Rural Development in Saskatchewan,
Canadian Agricultural Rural Communities Initiative,
National Soil and Water Conservation Program
and Prairie Farm Rehabilitation Administration
 - California Waterfowl Association
 - Canada Millennium Partnership Program
- Canadian Wildlife Service and World Wildlife Fund
(Endangered Species Recovery Fund)
- Department of Fisheries and Oceans Canada
 - Ducks Unlimited Canada
- Environment Canada through Eco-ACTION
- Government of Canada Habitat Stewardship Program for Species at Risk
 - National Fish and Wildlife Foundation (U.S.)
 - Native Plant Society of Saskatchewan
 - Nature Conservancy of Canada
 - Nature Saskatchewan
 - Nebraska Game and Parks Commission
- North American Wetlands Conservation Council
- Partners FOR the Saskatchewan River Easin
 - Pheasants Forever, Inc., (U.S.)
 - Prairie Conservation Action Plan
- Saskatchewan Agriculture and Food and Rural Revitalization
 - Saskatchewan Energy
- Saskatchewan Environment through the Fish and Wildlife Development Fund
 - SaskPower—Shand Greenhouse
 - Sask Water
- TD—Canada Trust Friends of the Environment Foundation
 - Tennessee Wildlife Resource Agency
 - The Nature Conservancy (U.S.)
 - Wildlife Habitat Canada
 - World Wildlife Fund
- Wyoming Game and Fish Department

Native Plant Society AGM

February 5-7, 2004

Swift Current, Sask.

Contact Garth Wruck at 668-3940

Share your Ideas!

If you have any comments or ideas about this newsletter, please contact Tracy Harrison at 787-8043 or email: tracy.harrison@swa.ca

For specific information about the Prairie Stewardship Program, please contact Jennifer Lohmeyer at 787-8707 or email: jennifer.lohmeyer@swa.ca

Landowner Stewardship Field Day

February 17, 2004

Tugaske, Sask.

Contact Julie Korol at 694-3101

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